

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-7 (Canceled).

8. (Original) An analyte monitoring device having a housing, the device comprising:

one or more needles, each having a tip, a retracted position, a position wherein the tip is extended from the housing a distance adapted to pierce the skin; and a light source fixed to the housing aligned to heat tissue aligned to intercept the extended positions of the needles.

9. (New) A method of monitoring the concentration of an analyte in a host or portion thereof over a given time period, said method comprising:

(a) making a first analyte concentration measurement in said host or portion thereof at a first point in said time period using a first substantially painless single use analyte concentration measurement means;

(b) making a second analyte concentration measurement in said host or portion thereof at a second point in said time period using a second substantially painless single use analyte concentration measurement means; and

(c) optionally making one or more additional analyte concentration measurements during said time period using one or more additional substantially painless single use analyte concentration measurement means; wherein said analyte concentration measurements are made according to a selected scheduling mode to monitor the concentration of said analyte in said host or portion thereof over said given time period.

10. (New) The method according to claim 9, wherein said host or portion thereof is interstitial fluid.

11. (New) The method according to claim 10, wherein said substantially painless single use analyte concentration measurement means is an interstitial fluid analyte measurement means.

12. (New) The method according to claim 11, wherein said interstitial fluid analyte measurement means makes an in situ analyte concentration measurement.

13. (New) The method according to claim 11, wherein said interstitial fluid analyte measurement means makes an ex vivo analyte concentration measurement.

14. (New) The method according to claim 13, wherein said interstitial fluid analyte concentration measurement means removes interstitial fluid from said host and analyzes said fluid outside of said host.

15. (New) The method according to claim 11, wherein said interstitial fluid analyte concentration measurement means comprises a microneedle.

16. (New) The method according to claim 9, wherein said analyte is glucose.

17. (New) The method according to claim 9, wherein the selected scheduling mode comprises a predetermined schedule.

18. (New) The method according to claim 17, wherein the predetermined schedule comprises measurements taken at fixed time intervals.

19. (New) The method according to claim 17, wherein the predetermined schedule comprises measurements taken at fixed times.

20. (New) The method according to claim 9, wherein the selected scheduling mode comprises a scheduling mode responsive to previously collected analyte concentration measurements.

21. (New) The method according to claim 20, wherein the previously collected analyte concentration measurements were taken over the previous 48 hours.

22. (New) The method according to claim 20, wherein the previously collected analyte concentration measurements were taken over the previous two hours or less.

23. (New) A method of monitoring the concentration of glucose in interstitial fluid of a host over a given time period, said method comprising:

(a) making a first interstitial fluid glucose concentration measurement at a first point in said time period using a first substantially painless single use interstitial fluid glucose concentration measurement means;

(b) making a second interstitial fluid glucose concentration measurement at a second point in said time period using a second substantially painless single use interstitial fluid glucose concentration measurement means; and

(c) optionally making one or more additional interstitial fluid glucose concentration measurements during said time period using one or more additional substantially painless single use interstitial fluid glucose concentration measurement means; wherein said interstitial fluid glucose concentration measurements are made according to a predetermined schedule to monitor the concentration of interstitial fluid glucose over said given time period.

24. (New) The method according to claim 23, wherein said interstitial fluid glucose measurement means makes an in situ measurement.

25. (New) The method according to claim 24, wherein said interstitial fluid glucose measurement means makes an ex vivo measurement.

26. (New) The method according to claim 25, wherein said interstitial fluid glucose concentration measurement means removes interstitial fluid from said host and analyzes said fluid outside of said host.

27. (New) The method according to claim 23, wherein said interstitial fluid glucose concentration measurement means comprises a microneedle.

28. (New) The method according to claim 23, wherein said method employs a device that comprises:

(a) at least said first and second substantially painless interstitial fluid glucose measurement means; and

(b) an activation means that activates said first and second measurement means according to a predetermined schedule.

29. (New) The method according to claim 28, wherein said activation means comprises hardware and software components that activate said first and second measurement means according to said predetermined schedule.

30. (New) A device for using in monitoring the concentration of an analyte in a host or portion thereof over a given period of time, said device comprising:

- (a) at least a first and a second substantially painless single use analyte concentration measurement means; and
- (b) an activation means for selectively activating said first and second analyte concentration measurement means according to a predetermined schedule.

31. (New) The device according to claim 30, wherein said activation means comprises hardware and software components that activate said first and second measurement means according to said predetermined schedule.

32. (New) The device according to claim 30, wherein said substantially painless analyte concentration measurement means are interstitial fluid analyte concentration measurement means.

33. (New) The device according to claim 32, wherein said interstitial fluid analyte concentration measurement means are glucose concentration measurement means.

34. (New) The device according to claim 32, wherein said interstitial fluid analyte concentration measurement means comprise a microneedle.

35. (New) The device according to claim 30, wherein said device comprises a removable cartridge that comprises said first and second analyte concentration measurement means.

36. (New) A system for use in monitoring the concentration of an analyte in a host or portion thereof over a given period of time, said system comprising:

(a) a removable cartridge comprising at least a first and a second substantially painless single use analyte concentration measurement means; and

(b) a device into which said cartridge may be inserted, wherein said device comprises an activation means for selectively activating said first and second measurement means of said cartridge according to a predetermined schedule.

37. (New) The system according to claim 36, wherein said activation means comprises hardware and software components that activate said first and second measurement means according to said predetermined schedule.

38. (New) The system according to claim 36, wherein said substantially painless analyte concentration measurement means of said cartridge are interstitial

fluid analyte concentration measurement means.

39. (New) The system according to claim 38, wherein said interstitial fluid analyte concentration measurement means are glucose concentration measurement means.

40. (New) The system according to claim 39, wherein said interstitial fluid analyte concentration measurement means comprise a microneedle.

41. (New) A kit for use in monitoring the concentration of an analyte in a host or portion thereof over a given period of time, said kit comprising: at least one of:

(a) a removable cartridge comprising at least a first and a second substantially painless single use analyte concentration measurement means; and

(b) a device into which said cartridge may be inserted, wherein said device comprises a an activation means for selectively activating said first and second measurement means of said cartridge according to a predetermined schedule.

42. (New) The kit according to claim 41, wherein said activation means comprises hardware and software components that activate said first and second measurement means according to said predetermined schedule.

43. (New) The kit according to claim 41, wherein said substantially painless analyte concentration measurement means of said cartridge are interstitial fluid analyte concentration measurement means.

44. (New) The kit according to claim 43, wherein said interstitial fluid analyte concentration measurement means are glucose concentration measurement means.

45. (New) The kit according to claim 43, wherein said interstitial fluid analyte concentration measurement means comprise a microneedle.

46. (New) The kit according to claim 41, wherein said kit further comprises a second cartridge.

47. The kit according to claim 41, wherein said kit further comprises instructions for using said kit in monitoring the concentration of an analyte over a period of time.